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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,531	09/22/2003	Larry E. Maple	10010995-6	9934

7590

07/18/2006

HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P. O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER
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WILLS, MONIQUE M

ART UNIT	PAPER NUMBER
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1745

DATE MAILED: 07/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/667,531	<b>Applicant(s)</b> MAPLE, LARRY E.	
	<b>Examiner</b> Monique M. Wills	<b>Art Unit</b> 1745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 24 April 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 36-40 and 45-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 36, 45 and 46 is/are rejected.
- 7) ☒ Claim(s) 37-40, 47 and 48 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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DETAILED ACTION

*Response to Amendment*

This Office Action is responsive to the Amendment filed April 24, 2006. Claims 37-40 & 47-48 remain objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form. The rejection of claims 36 & 45-46 under 35 U.S.C. 102(b) as being anticipated by W.E. Reed et al. U.S. Patent 2,896,875 is overcome. However, claims 36 & 45-46 are newly rejected under 35 U.S.C. 103(a) as being obvious over W.E. Reed et al. U.S. Patent 2,896,875.

*Allowable Subject Matter*

Claims 37-40 & 47-48 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 37-40 would be allowable over the prior art of record, because the prior art is silent to a battery-powered device comprising a coiled spring contact comprising a plurality of concentric windings contiguous with an upper

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end turn with a terminal contact point laterally offset from an axis of rotation defined by the windings.

Claim 47 would be allowable over the prior art of record, because the prior art is silent to a coiled spring contact comprising a plurality of concentric windings, wherein the rupturing means comprises at least one bend in an upper turn of the coiled spring contact, each bend having an apex facing into the battery compartment to define a terminal contact point.

Claim 48 would be allowable over the prior art of record, because the prior art is silent to a coiled spring contact comprising a plurality of concentric windings defining an axis of rotation, wherein the scarping means comprises a bend on an upper turn of the coiled spring contact laterally offset from the axis of rotation, the bend having an apex facing into the battery compartment to define a terminal contact point.

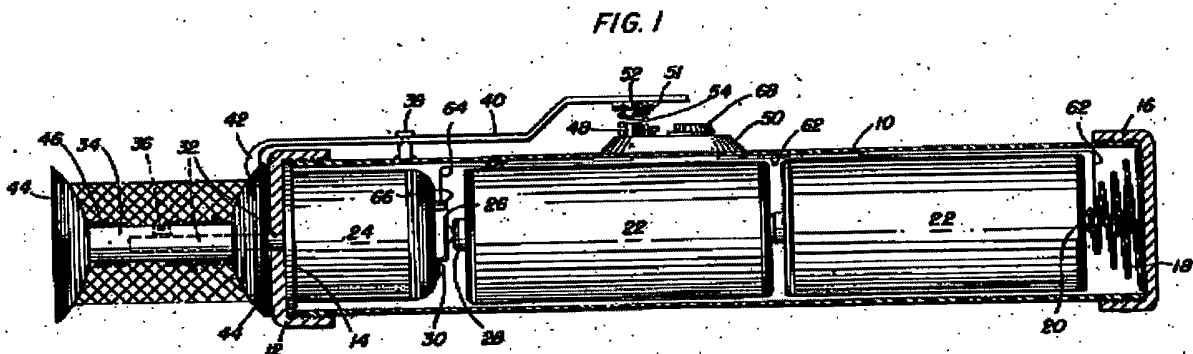
*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 36 & 45-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over W.E. Reed et al. U.S. Patent 2,896,875.

With respect to claims 36 & 45-46, Reed teaches a battery-powered device



(See figure 1) comprising coiled spring contact (18) disposed in compartment (10).

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However, Reed does not expressly disclose a coil that scrapes away a portion of the insulating contaminant layer from a surface of an abutting terminal (claims 36 & 46), or as means for rupturing an insulating contaminant layer on a localized region of an abutting battery terminal surface (claim 45).

However, it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to employ a spring contact, since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70. The skilled artisan recognizes that deformities in the spring from normal wear and tear will rearrange parts of the coil, forming means to scraping away a portion of an insulating contaminant layer from a surface of an abutting terminal of an installed battery. Furthermore, the coiled spring contact, through normal wear and tear, would form means for rupturing an insulating contaminant layer on a localized region of an abutting battery terminal surface.

### *Response to Arguments*

Applicant's arguments with respect to claims 36 & 45-46 have been considered but are moot in view of the new ground(s) of rejection.

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*Conclusion*

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Monique Wills whose telephone number is (571) 272-1309. The Examiner can normally be reached on Monday-Friday from 8:30am to 5:00 pm.

If attempts to reach Examiner by telephone are unsuccessful, the Examiner's supervisor, Patrick Ryan, may be reached at 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MW

  
PATRICK JOSEPH RYAN  
SUPERVISORY PATENT EXAMINER

7/10/06